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Argentina

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August 2000

Argentina

Argentina is a significant and growing Latin American energy consumer and a leader in the privatization of state-owned energy companies. It is a net exporter of energy, primarily to neighboring Brazil and Chile.

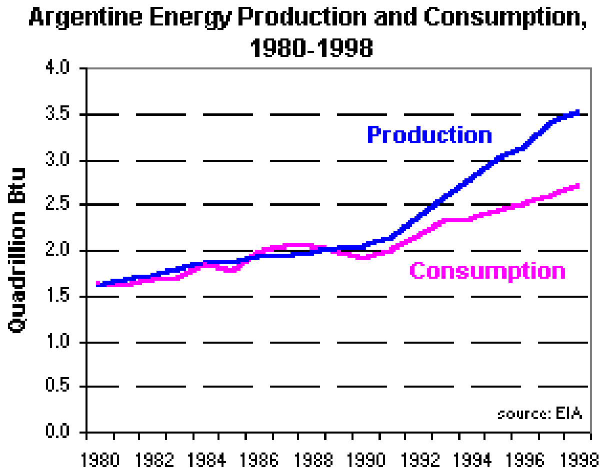
Note: Information contained in this report is the best available as of August 2000 and is subject to change.

BACKGROUND

Over the last decade, Argentina has been one of the most economically and politically stable countries in South America. The end of 1999 saw the peaceful and democratic transition from Peronist Carlos Menem, president since 1989, to Fernando de la Rua of the center-left Alliance coalition. Economic stabilization was a high priority under Menem, who opened the economy, sold off virtually all state-owned companies, and introduced an exchange rate system pegging the peso to the dollar and limiting the money supply to the level of hard-currency reserves. For most of the 1990s, Argentina maintained solid fiscal, trade and current account balances, low inflation, manageable foreign debt, liberal market economics, banking reforms, free trade, and openness towards foreign investment. Most public utilities now have been privatized, including telecommunications, airlines, power generation and distribution, natural gas transportation and distribution, water systems, and railways.

Many of Menem's key economic policies will remain in place under President de la Rua, who has maintained the Argentine peso's peg to the U.S. dollar. After registering a 3% gross domestic product (GDP) contraction in 1999 in the wake of Brazil's economic difficulties, Argentina now seems poised for better-than-expected GDP growth approaching 3% in 2000. Tax revenues have exceeded expectations during the first half of 2000, the new government's efforts to cut spending have been successful, and Argentine exports have been strong, contributing to renewed economic health. While there has been some social opposition, mostly in the form of strikes and mass demonstrations, de la Rua has not backed away from IMF-backed austerity measures. President de la Rua's government has increased taxes and reduced public-sector wages in efforts to reduce the fiscal deficit. He also aims to make the country more attractive for foreign investment.

ENERGY

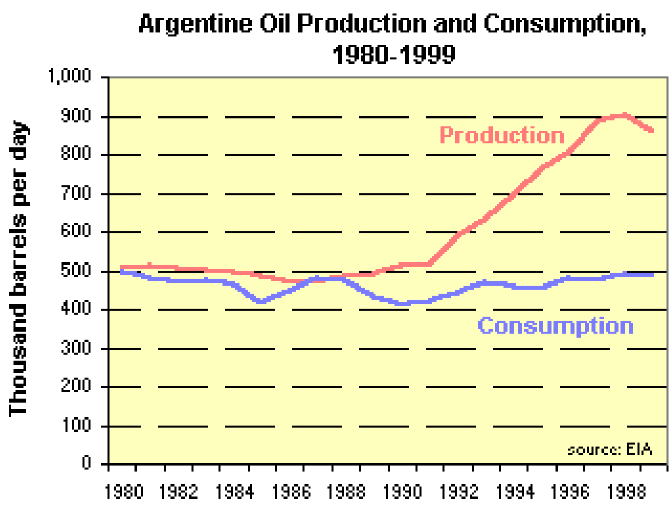


Argentina has a wealth of energy resources, including oil, natural gas, and hydroelectric potential. Argentina is a net exporter of oil, gas, and electricity. Largely as a result of energy sector reforms, total reserves and production of hydrocarbons have doubled over the past decade, and total installed power generation capacity has increased by one-third. Total consumption of energy has risen by more than 30% since 1990, and has almost doubled since 1980. Argentina could become the major energy supplier of the Southern Cone region, and due to the relative maturity of its own energy markets, Argentine energy companies will look increasingly to the country's neighbors for future opportunities.

Argentina's energy industry was revitalized in the 1990s as a result of drastic restructuring, the privatization of the state oil company *Yacimientos Petroliferos Fiscales* (YPF), and increased private and foreign investment, the latter a result of favorable investment and tax laws. Many foreign firms have entered the Argentine oil market, attracted by the prospects of regional energy integration occurring in South America. Most notably, in June 1999, Spain's oil, natural gas and chemicals group, Repsol, completed its $13.5-billion takeover of YPF, Argentina's largest oil and gas company, creating one of the world's largest oil and gas companies, with revenue of more than $26 billion, and 4.1 billion barrels of oil reserves. YPF had been the dominant oil and gas presence in Argentina, and the merged company, Repsol-YPF, has a major presence throughout Argentina and the rest of Latin America, plus has other operations in North Africa, North America, and Europe.

The Argentine ministry with jurisdiction over energy issues intends to further deregulation. While state companies have been privatized, monopolies remain in gas distribution and electricity sectors. In March 2000, the department announced plans to submit legislation to Congress that would encourage new companies to enter these markets. Nuclear electricity generation plants and electricity generation and transmission companies are scheduled for sale in 2000.

OIL



Argentina has around 2.8 billion barrels of proven oil reserves, distributed among 19 sedimentary basins. Most of Argentina's oil is produced in two onshore basins: Neuquén in southwest Argentina, and Golfo San Jorge, in the southeast. Other major producing basins are Noroeste, Cuyana, and Austral. To date, there has been little activity offshore. Puesto Hernandez, in the Neuquén basin, serves as the starting point for three major pipeline routes transporting crude oil north to the Lujan de Cuyo refinery near Mendoza; over the Andes to Concepción, Chile; and east to Puerto Rosales on the Atlantic. The pipeline terminus at the port of Concepción, Chile, provides an outlet for shipments to the U.S. Gulf Coast or the Pacific Rim, but so far only small volumes have been shipped to these distant customers.

Argentina's oil production increased by about 75% in the 1990s, from just over 500,000 bbl/d in 1990 to about 900,000 bbl/d in 1999. About one-third of Argentina's oil is exported, mainly to Brazil, Chile and Uruguay. Argentina's net oil exports reached 372,000 bbl/d in 1999, compared to about 100,000 bbl/d in the early 1990s. However, many analysts believe that Argentina will not meet a long-held goal of increasing oil production to 1 million bbl/d, as natural gas continues to grow as the fossil fuel of choice in Argentina.

Repsol-YPF is Argentina's largest producer of crude oil, followed by privately-owned Pérez Companc and Petrolera Argentina San Jorge, which was bought by U.S.-based Chevron in September 1999. Exploration and production activity in Argentina is expected to pick up in 2000, after slowing down in the late 1990s as a result of the world oil price collapse. Repsol-YPF plans to increase its 1999 oil and gas output of roughly 1 million barrels of oil equivalent per day (boe/d) to about 1.5 million boe/d by 2006. The bulk of this production increase will come from production outside Argentina, however, as the company focuses increasingly on neighboring Bolivia and also on Trinidad and

Tobago. Pérez Companc produces just over 100,000 bbl/d, and the company plans to increase investment in exploration and production activities in 2000. Pérez Companc, like Repsol-YPF, is increasing its holdings outside Argentina, with just over half of its current oil and gas reserves located in Argentina (down from 97% in 1993). Chevron, having acquired San Jorge as well as Canada's Alberta Energy's Argentine oil assets, is proceeding cautiously in exploration and production in Argentina. San Jorge produces less than 80,000 bbl/d, less than 10% of Argentina's total production. Other companies seeking to increase involvement in the Argentine upstream oil sector include Pan American (a joint venture between BP Amoco and Argentina's Bridas), France's TotalFinaElf, U.S.-based Unocal, Argentina's Pluspetrol, and Brazilian state-owned Petrobras.

In addition to many unexplored areas in current producing basins, Argentina's offshore shelf holds promise for future discoveries given its size (larger than the North Sea) and relatively shallow depths close to shore. The Malvinas/Falkland Islands area is subject to conflicting sovereignty claims by Argentina and the United Kingdom. The two countries signed an agreement in September 1995 to share the potential economic benefits from oil exploration in a 7,000-square-mile cooperation zone southwest of the Islands. According to a law supported by former President Menem, Argentina does claim the right to levy taxes on exploration and production activities in the area.

Downstream

Three companies control the downstream oil sector in Argentina: Repsol-YPF, Esso, and Shell. Pérez Companc also has stakes in two Argentine refineries at San Lorenzo and El Norte, as well as a substantial retail network. Repsol-YPF accounts for around 50% of the country's total refining capacity, mainly from its ownership in the La Plata and Lujan de Cuyo refineries in the Greater Buenos Aires region, among the largest in the country. The remaining capacity is split among Shell's one refinery (17%), Esso's two refineries (16%), and the five refineries of four small companies (17%). Prices and distribution facilities have been liberalized, but Argentineans pay more for gasoline than other Latin American countries, with prices similar to those in the United Kingdom and about triple those in the United States. The government has considered introducing gasoline and diesel import subsidies as an anti-oligopoly tool to drive prices down. The subsidy would be a way to encourage new marketers to challenge Repsol-YPF, Esso, and Shell.

In March 2000, Brazilian Petrobras and Repsol-YPF announced an agreement whereby the two companies would swap their assets in Brazil and Argentina. Under the agreement, Petrobras will acquire oil refining and distribution assets in Argentina, while Repsol-YPF will gain assets in Brazil's upstream and downstream oil operations and also increase activity in gasoline distribution. The deal was worked out after Repsol-YPF was ordered to sell some of its downstream assets to comply with legal regulations associated with the company's 1999 merger.

NATURAL GAS

Argentina has the second largest proven reserves of natural gas in South America (after Venezuela), at over 24 trillion cubic feet (Tcf), and probable reserves are much higher. The largest producing basins are Neuquen, Austral, and Noroeste, with the Neuquen basin alone accounting for over 60% of Argentine gas production. Production in the Austral basin is constrained by the capacity of its pipeline to Buenos Aires. Supply of Argentine gas currently exceeds combined domestic and export demand, although demand is expected to increase rapidly in the coming decade.

Industry Organization

Argentina's natural gas industry -- production, transportation, distribution, and marketing -- is in the hands of the private sector and is operated within a competitive market structure. There is free access to transmission and distribution pipelines, and there are no restrictions on imports and exports of natural gas. State regulatory agency ENARGAS sets rates for natural gas transmission and distribution carriers operating under a non-discriminatory "open access" system.

In 1992, former state monopoly Gas del Estado was split into two pipeline companies, Transportadora de Gas del Sur (TGS), and Transportadora de Gas del Norte (TGN), along with eight distributors operating within a regulated monopoly. TGS is South America's largest pipeline company. The company delivers two-thirds of the nation's total gas consumption (to southern Argentina and greater Buenos Aires) and is 70%-owned by U.S.-based Enron and Pérez Companc. Transmission activities are carried out by TGS and TGN, which cannot sell gas, but must guarantee free access to their pipelines. Large users can purchase gas from transmission and distribution companies or negotiate prices directly with producers. Metrogas is the country's largest distributor. Natural gas is priced on a competitive basis in relation to petroleum products, but natural gas tariffs are adjusted every six months in relation to a U.S. index and the seasonal prices encountered at the wellhead during the summer and winter. Privatization of the sector has caused a decline in the prices, which are among the lowest in the region.

Repsol-YPF is the country's largest natural gas producer. While it has the largest share of Argentina's gas reserves, the company has limited pipeline and transmission assets, and competition regulations prevent expansion in this area. TotalFinaElf is increasing its presence in the Argentine gas sector. In June 2000, TotalFinaElf announced intentions to purchase the Argentine and other Latin American assets of Transcanada Pipelines, a deal that should be finalized by the end of 2000.

Pipelines

Chile is the largest export customer for Argentine gas. There are four pipelines connecting Argentine gas sources to Chile, four pipelines in various stages of the planning process to connect to Brazil, and several domestic pipelines. Additional domestic pipeline capacity is required to serve growing demand, with TGN and TGS now operating near capacity.

The Neuquen basin is the source for all four Argentina-Chile pipelines. The oldest Argentina-Chile pipeline is the *GasAndes*, which runs to central Chile, in operation since 1997. The *Gasoducto del Pacifico* opened in November 1999, transporting 140 million cubic feet per day (Mmcf/d) over 330 miles (530 kilometers) to southern Chile. The pipeline is very similar to the previously planned British Gas TransAndino gas pipeline project. Gasoducto del Pacifico is owned by a consortium of TransCanada Pipelines (operator), El Paso International, Chile's Gasco, ENAP, and Repsol-YPF. Presently, there is not enough demand to satisfy the pipeline capacity, as electricity generation in southern Chile is mostly non-thermal (hydropower). The remaining two pipelines connect northern Chile to Argentine sources, and the pipelines run parallel to each other and supply a market that is now large enough to support only one pipeline. The *GasAtacama* pipeline, with a 300 Mmcf/d capacity, came onstream in July 1999 and is co-owned by U.S.-based CMS and Endesa. The NorAndino pipeline has a capacity of just over 280 Mmcf/d and came onstream in November 1999. It is owned by Belgium's Tractabel and the U.S.-based Southern Company.

One Argentina-Brazil pipeline has come onstream. The 273-mile, $250-million, 88-Mcf/d pipeline connects Paraná, Argentina, to Uruguaiana, Brazil. It provides gas to a $350-million, 500-megawatt (MW) AES power plant in Uruguaiana. Service began in early July 2000. Additional Argentina-Brazil pipelines are in various stages of planning, although recent natural gas discoveries in Bolivia and potential Brazilian discoveries could prevent development of the pipeline projects. These potential Argentina-Brazil pipelines include the Cruz del Sur, Trans-Iguacu, and Mercosur pipelines. The Cruz del Sur would extend to Brazil the Argentine-Uruguayan pipeline that currently is under construction. The Trans-Iguacu pipeline would cross from northern Argentina's Noroeste basin into southern Brazil. The Mercosur pipeline would tap northwestern Argentina's Neuquen basin to Curitiba, Brazil, and could extend to Sao Paulo.

ELECTRICITY

Argentina relies mostly on hydropower and natural gas to fuel its electricity sector. In 1998, the country had 21.8 gigawatts (GW) of installed generation capacity, of which about 53% was fossil fuel-based (primarily natural gas), 42% hydroelectric, and about 5% nuclear. Electric generation in 1998, which totaled 75.2 billion kilowatthours (bkwh), was 48% hydropower, 42% thermal, and 10% nuclear.

Industry Organization

Argentina has one of the most competitive deregulated power sectors in South America. Since 1991, the government has pursued an aggressive privatization program in tandem with the creation of an open electricity market, which has attracted foreign investors and project partners attracted by the economic growth in the country. Today, power generation capacity generally satisfies domestic demand, but there remain some remote areas that have yet to be connected to the national grid.

The main power regulatory body in Argentina is Ente Regulador de la Energía Eléctrica (ENRE), which oversees all aspects of the industry and mediates disputes among the participants. The functions of generation, transmission, and distribution are open to the private sector, but there are restrictions on ownership of more than one function within the industry. The law guarantees access to the grid in order to create a competitive environment and to allow generators to serve customers anywhere in the country. Argentina's power market, Mercado Eléctrico Mayorista (MEM), is under the administration of the Compañía Administradora del Mercado Mayorista Eléctrico S.A. (CAMMESA), a non-profit organization owned by the participants in the power grid and headed by the Ministry of Energy.

Generation is carried on by independent companies, including some state-owned companies. Generators earn income from the sale of electricity and from providing reserve capacity to the system. The transmission function is carried out by six primary distribution companies and one high-tension transmission company (Transener). Smaller distribution companies that share part of their distribution lines operate under a separate organization--Technical Additional Service of the Transportation Function (PFTT), which reports to CAMMESA. Expansions and modifications are established by CAMMESA ensuring maximum stability and security within the system. Transmission companies operate as a regulated monopoly with regulated prices, and are not allowed to sell power. Distribution companies also operate as regulated monopolies within concession areas that are awarded on a competitive basis for 95 years.

Tariffs are regulated by ENRE and include connection and usage charges. While most distribution companies have been privatized, some remain in the hands of the provincial governments.

Regional Cooperation
There has been an unprecedented amount of regional cooperation between Latin American countries in recent years, both in cross-border trade and in joint development projects. Brazil and Chile are the two most important export markets for Argentina, and the three governments are integrating their electricity markets and moving towards free competition among generators, a ban on state subsidies, and a cost-based pricing system.

The Swiss-Swedish electric engineering group Asia Brown Bovery (ABB) signed a contract with Cien (the Brazilian subsidiary of Spain's Endesa) in July 2000 to build a transmission system linking Brazilian and Argentine electricity grids. The project will bring 1,000 megawatts (MW) over a 310-mile (500-kilometer) transmission line from Argentina to Brazil. The line is slated begin operation by mid-2002. This will be ABB's second such power interconnection between the two countries, as its first line became operational in May 2000. Brazil's Electrobras is operating the 1,000-MW connection line. A conversion plant, operated by Cien, transforms the electricity from Argentina's standard 50 hertz to Brazil's standard 60 hertz.

Interconnection with Uruguay's electric system--with a capacity to handle up to 2,000 MW--has been in effect since 1974, and Uruguay often exports electricity to its western neighbor. The giant Salto Grande dam is a shared Argentine-Uruguayan operation. Several trans-Andean power line projects offer the prospect of increased electricity sales to Chile.

Yacyreta
The $8.5-billion Argentine and Paraguayan Yacyreta hydroelectric project originally was intended to have an installed capacity of 4,050 MW, but was later scaled down to 2,700 MW. The project was initially estimated to cost $1.5 billion and is about nine years behind schedule. Disagreements between Paraguay and Argentina, as well as financing difficulties and management irregularities, have led to repeated delays. The 20th turbine was installed in October 1997 and came onstream in February 1998.

Yacyreta generates 60% of its intended capacity. Raising the water level in the dam from its current 251 feet above sea level to the intended 274 feet above sea level would increase output and profitability, but lack of funds has prevented the necessary construction. In January 2000, the World Bank stated its opposition to raising the water level, citing environmental concerns as well as concerns over the displacement of indigenous peoples currently inhabiting lands that would be flooded. Argentina and Paraguay decided in July 2000 to hold a tender to create a trust fund to finance the completion of the dam. Yacyreta will raise its water level, allowing it to boost utilization of its 20 turbines to their maximum levels. The tender for the trust fund is expected to be held in August 2000. A separate tender for the construction work will come before the end of the year, according to the holding company that operates the dam. The work will cost an estimated $700 million.

Paraguay and Argentina are planning to build jointly another hydroelectric dam on the Paraná, the 3,000-MW Corpus Critsi dam. The dam would be built about 124 miles upriver of the Yacyreta. To get the project moving, Argentina's Foreign Minister Adalberto Rodriguez Giavarini and his Paraguayan colleague Juan Esteban Aguirre signed a working agreement in the presence of Argentine President Fernando de la Rua and Paraguayan President Luis González Macchi in May 2000. The agreement calls for constructing the dam through international public bidding, and assures that the project's construction will be environmentally sound. There has been considerable opposition to the project among the local community and among environmentalists.

Nuclear Power
Argentina has the most advanced nuclear energy program in Latin America. The 350-MW Atucha I and 650-MW Embalse facilities are fully operational. For the last decade, Argentina has been in the process of building an Atucha II plant. The project is 80% completed, but would require an estimated $800 million to finish the job. Construction currently has been halted, pending the outcome of a feasibility study by an interministerial commission, expected in August 2000. The government had intended to privatize all three plants as one unit. As of July 2000, privatization had been put on hold indefinitely.

ENVIRONMENT
Considered the richest country in South America, Argentina has largely ignored the environmental consequences of building its economy and only now is beginning the process of including environmental considerations into its plans. Although the country experienced a period of rapid economic expansion during the 1990s, economic growth has been marred by sporadic outbreaks of inflation and recession. Overall demand for energy, however, increased steadily through the 1990s and continues to soar today. Urban and coastal water pollution, deforestation, poor

management of agricultural lands, and degraded air quality in several urban areas are the main environmental problems.

The city of Buenos Aires covers an area of approximately 9,936 square miles, is Argentina's largest urban center and Latin America's third largest. Although the population of Buenos Aires is only 3.1 million, this statistic balloons each day as 12 million workers, tourists and students flood the city. Like many major Latin American cities, Buenos Aires has struggled -- with little success -- to curb the level of automobile emissions through stronger regulations on automobile exhaust systems, planning for public transportation or the promotion of clean-vehicle technology.

Argentina has large supplies of energy resources such as oil, hydropower and relatively clean-burning natural gas. In 1997, hydroelectric power provided approximately 44% of Argentina's entire electric supply. Argentina's reserves of natural gas have more than doubled over the past 20 years, and most experts agree that natural gas will fuel a significant portion of future Argentine energy demand growth. Per capita carbon emissions in Argentina are currently the highest in South America, with the exception of Venezuela, and reflect similar patterns in per capita energy consumption. Argentina's energy consumption has been dominated by the industrial (46%) and transportation (24%) sectors, and is expected to continue its increase at the current rate of economic growth -- about 6% annually.

A significant amount of Argentina's industrial activity takes place on the pampa, an area of vast grassy plains in northern Argentina. Included among these industries are mines, smelters, petroleum wells and refineries, which have generated a considerable amount of pollution in their immediate surroundings as well as downstream towards other communities. Petroleum refineries in particular have polluted groundwater and underground aquifers with chemicals such as mercury, lead and other toxins.

Energy consumption per dollar of GDP (energy intensity) in Argentina is relatively lower than energy intensity levels of most other countries in South America. Carbon intensity in Argentina is low when compared to the carbon intensity levels of some of its South American neighbors such as Venezuela (0.62 metric tons of carbon per thousand $1990). The amount of carbon created per dollar of GDP in Argentina has remained relatively stable since 1980.

Argentina has an enormous amount of potential in the development of renewable energy and investors in the country are starting to display significant interest in renewable energy projects. Sources of energy such as wind, solar, biomass and geothermal are all real possibilities for future energy production in Argentina. Currently, hydroelectric power ranks as the dominant renewable energy resource in Argentina, making up almost 14% of the country's total primary energy consumed in 1998.

Argentina is beginning to realize the importance of preserving its environment for the future and has stepped forward as Latin America's leader in environmental issues. The country also has recognized and has attempted to address growing environmental concerns related to global climate change and has voluntarily committed itself to standards not generally accepted by most other non-Annex I countries. Restructuring of Argentina's energy sector is encouraging improvement in overall energy efficiency, introduction of more modern environmental policies and increased use of cleaner energy sources. Nevertheless, Argentina's environmental policy continues to confront the dilemma of strengthening its current environmental regulatory system.

COUNTRY OVERVIEW

President: Fernando de la Rua (since December 1999)
Independence: July 9, 1816 (from Spain)
Population (1999E): 36.7 million; annual growth rate, 1.3%
Location/Size: Southern South America/2.8 million square kilometers (1.1 million square miles), about four times the size of Texas
Major Cities: Buenos Aires (capital), Córdoba, La Plata, Mendoza, Rosario, Santa Fe
Languages: Spanish (official), English, Italian, German, French
Ethnic Groups: White (85%), other - includes mestizo and Indian (15%)
Religion: nominally Roman Catholic 90% (less than 20% practicing), Protestant 2%, Jewish 2%, other 6%
Defense (8/98): Army (41,000), Navy (20,000), Air Force (12,000), Reservists (375,000), Paramilitary Forces (31,240)

ECONOMIC OVERVIEW

Minister of the Economy: Jose Luis **Machinea**
Currency: Peso
Financial Exchange Rate: US$1 = 1 Peso (rate fixed by law)
Nominal Gross Domestic Product (1999E): $280 billion
Real GDP Growth Rate: (1999E): -3.0% **(2000E)**: 2.8%
Inflation Rate: (1999E): -1.8% **(2000E)**: 1.0%
Unemployment Rate: (1999E): 14.3% **(2000E)**: 14.4%

Current Account Balance as a % of GDP: (1999E): -4.3% **(2000E)**: -3.6%
Major Trading Partners: Brazil, United States, Japan, Uruguay, Chile, Germany, France
Major Export Products (1999): Agricultural products and manufacturing of agricultural products (55%), industrial products (30%), oil and energy (15%)
Major Import Products (1999): Consumer goods (23%), industrial inputs and raw materials (34%), capital goods (43%)
Total Foreign Debt (1999E): $126 billion

ENERGY OVERVIEW
Proven Oil Reserves (1/1/00E): 2.8 billion barrels
Oil Production (1999): 857,200 barrels per day (bbl/d), of which about 802,200 bbl/d was crude oil
Oil Consumption (1999E): 485,000 bbl/d
Net Oil Exports (1999E): 372,200 bbl/d
Crude Oil Refining Capacity (1/1/00E): 661,800 bbl/d
Natural Gas Reserves (1/1/00E): 24.3 trillion cubic feet (Tcf)
Natural Gas Production (1998E): 1.1 Tcf
Natural Gas Consumption (1998E): 1.1 Tcf
Coal Reserves (12/31/96E): 143 million short tons (all lignite and subbituminous)
Coal Production (1998E): 280,000 short tons
Coal Consumption (1998E): 1,350,000 short tons
Electric Generation Capacity (1/1/98E): 21.8 gigawatts (GW)
Electricity Generation (1998E): 75.2 billion kilowattthours (bkwh); hydroelectricity 48%, conventional thermal 42%, nuclear 10%
Electricity Consumption (1999E): 75.6 bkwh

ENVIRONMENTAL OVERVIEW
Minister of Social Development and Environment: Graciela **Fernandez** Mejide
Total Energy Consumption (1998E): 2.7 quadrillion Btu* (0.7% of world total energy consumption)
Energy-Related Carbon Emissions (1998E): 36.4 million metric tons of carbon (0.6% of world carbon emissions)
Per Capita Energy Consumption (1998E): 75.34 million Btu (vs. U.S. value of 350.7 million Btu)
Per Capita Carbon Emissions (1998E): 1.0 metric tons of carbon (vs U.S. value of 5.5 metric tons of carbon)
Energy Intensity (1998E): 12,200 Btu/ $1990 (vs U.S. value of 13,400 Btu/ $1990)**
Carbon Intensity (1998E): 0.16 metric tons of carbon/thousand $1990 (vs U.S. value of 0.21 metric tons/thousand $1990)**
Sectoral Share of Energy Consumption (1997E): Industrial (46.3%), Transportation (24.0%), Residential (20.4%), Commercial (9.4%)
Sectoral Share of Carbon Emissions (1997E): Industrial (42.9%), Transportation (33.2%), Residential (17.3%), Commercial (6.6%)
Fuel Share of Energy Consumption (1998E): Natural Gas (43.0%), Oil (36.9%), Coal (1.1%)
Fuel Share of Carbon Emissions (1998E): Oil (49.9%), Natural Gas (48.1%), Coal (2.0%)
Renewable Energy Consumption (1997E): 394 trillion Btu* (16% increase from 1996)
Number of People per Motor Vehicle (1997): 6.5 (vs U.S. value of 1.3)
Status in Climate Change Negotiations: Non-Annex I country under the United Nations Framework Convention on Climate Change (signed June 12, 1992 and ratified on March 11, 1994). Signatory to the Kyoto Protocol (signed March 16, 1998).
Major Environmental Issues: Erosion resulting from inadequate flood controls and improper land use practices; irrigated soil degradation; desertification; air pollution in Buenos Aires and other major cities; water pollution in urban areas; rivers becoming polluted due to increased pesticide and fertilizer use
Major International Environmental Agreements: A party to the Antarctic-Environmental Protocol, Antarctic Treaty, Biodiversity, Climate Change, Desertification, Endangered Species, Environmental Modification, Hazardous Wastes, Law of the Sea, Marine Dumping, Nuclear Test Ban, Ozone Layer Protection, Ship Pollution and Wetlands. Has signed but not ratified Marine Life Conservation

* The total energy consumption statistic includes petroleum, dry natural gas, coal, net hydro, nuclear, geothermal, solar and wind electric power. The renewable energy consumption statistic is based on International Energy Agency (IEA) data and includes hydropower, solar, wind, tide, geothermal, solid biomass and animal products, biomass gas and liquids, industrial and municipal wastes. Sectoral shares of energy consumption and carbon emissions are also based on IEA data.
** GDP based on EIA International Energy Annual 1998.

ENERGY INDUSTRY
Organization: The energy sector has been privatized and deregulated, with many private sector participants. **Oil and gas producers** Repsol-YPF, Pérez Companc, Petrolera San Jorge, BP, TotalFinaElf, Austral, Astra, Bridas,

Tecpetrol, Pluspetrol. **Natural gas pipeline companies** have also been privatized - Transportadora de Gas del Norte, Transportadora de Gas del Sur**. Electric power companies** - numerous producers in a highly competitive generation market, three transmission companies in a regulated monopoly, three regional distributors, municipal utilities.
Major Ports: Bahía Blanca, Buenos Aires, La Plata
Major Oil and Gas Producing Basins: Neuquén, Austral, Golfo San Jorge, Cuyana, Northwest
Major Refineries (Capacity): YPF La Plata (189,000 bbl/d), YPF Lujan de Cuyo (120,000 bbl/d), Shell Buenos Aires (110,000 bbl/d), Esso Campana (88,000 bbl/d), Refisam - San Lorenzo (37,600 bbl/d), Refinor - Campo Duran (32,000 bbl/d); Total Capacity - 661,800 bbl/d

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Links

For more information on Argentina, see these other sources on the EIA web site:
EIA - Country Information on Argentina

Links to other U. S. Government sites:
CIA World Factbook - Argentina
U.S. Department of Energy's Office of Fossil Energy's International section - Argentina
U.S. State Department Background Notes - Argentina
U.S. International Trade Administration, Country Commercial Guide - Argentina
U.S. Embassy in Argentina
U.S. Trade and Development Agency - Latin America and the Caribbean
U.S. State Department's Consular Information Sheet - Argentina
International Trade Administration, Energy Overview of Argentina

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Argentina's Embassy in Washington, DC
Repsol-YPF
Argentina's Ministry of Economy and Public Works
LatinWorld's section on Argentina
Argentina Laws related to Energy
ASTRA, Argentine oil and gas producer
National Law Center InterAm Database -- Argentina
LANIC -- Argentina
The Latin American Integration Association (ALADI)
ARPEL, Regional Association of Oil and Natural Gas Companies in Latin America and the Caribbean
The Regional Electric Integration Commission of Latin America (CIER)
Latin American Gas online news
International Energy Agency Information on Argentina
Argentine Economy Links
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International Newspapers Online: Argentina
University of Maryland Americas Research Information Center, Argentina
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